

## REMARKS

Applicants respectfully request further examination and reconsideration in view of the above amendments and the comments set forth fully below. Claims 1 and 3-22 were pending. Within the previous Office Action, Claims 1 and 3-22 have been rejected. By the above amendment, Claims 1 and 16 have been amended. Accordingly, Claims 1 and 3-22 are now pending.

By the above amendment, Claims 1 and 16 have been amended in order to overcome the objections raised in the previous Office Action. The amended Claims 1 and 16 clearly define the present invention, describe the characteristics, objects and efficacy of the present invention and further distinguish features of the present invention from those of the cited references. All of the amendments are fully supported by the specification and figures of the present invention as originally filed. The present specification, on at least Page 7, Paragraph 0041, Lines 7-8 and Page 10, Paragraph 0048, Lines 23-24 and the drawings of Figures 1a, 1b, 2a, 2b, 4 and 5a support the amendments. Therefore, no new matter has been added therein.

### **Rejections Under 35 U.S.C. § 102**

Within the Office Action, Claims 16, 20 and 22 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,940,884 to Mason Jr. (hereinafter referred to as "Mason"). After carefully reviewing Mason and the rejection of Claims 16, 20 and 22, the Applicant respectfully submits that Mason does not anticipate the present invention, as claimed in Claims 16, 20 and 22.

As in the amended Claim 16, a weed-preventing paper for cultivating a plant comprises a paper body covering a surface of a soil where said plant is to be grown, and having at least two cross openings for said plant to pass therethrough, wherein one or said at least two cross openings is arranged in a central portion and said at least two cross openings have a lateral crosscut passing therethrough and extending to an edge of said paper body for facilitating said paper body to be mounted around a stem of said plant and a weed-preventing agent contained in said paper body for blocking light so as to prevent the growth of a weed surrounding said plant.

Mason discloses a readily adjustable, moisture retainable and air transferable soil cover. The soil cover is made up of a biodegradable cellulose paper and a plastic film wherein the plastic film is adhered to the upper surface of the biodegradable cellulose paper. The soil cover has been perforated in a series of concentric circles together with at least one radial perforation. In use, the soil cover is torn along one of the concentric perforations so as to give

the finished soil cover a diameter that will fit within the pot. Additionally, the center concentric perforation is also removed to provide for the stem of the plant, and one of the radial perforations is torn to enable the cover to be placed about the plant.

For clearly differentiating the features and the functions of the present application from those of Mason, the differences therebetween are compared as follows:

1. The constitutions of the main body in Mason and the present application are different.

The soil cover of Mason is at least constituted by a biodegradable cellulose paper and a plastic film, [Mason, col. 1, lines 19-21, col. 2, lines 24-26, Figure 3], but the main body of the weed-preventing paper of the present application is only a paper body.

As described in the Background Of The Invention section of Mason, one objective of the soil cover of Mason is to prevent the evaporation of water from the soil into the atmosphere so that the plastic film is capable of transmitting gases rather than moisture. However, it is well known that when discarded, the plastic film is harmful to the environment.

2. The structures of the opening in Mason and the present application are different.

- (1) The shape of the center opening:

In Mason's soil cover, a central opening is formed by the removal of the center concentric perforation therein. Clearly, the central opening has a circular shape owing to the concentric perforation. The size of such a circular opening must be further adjusted as the plant size changes, such as by further tearing another concentric perforation. Before adjusting the size of the circular opening, it might occur that the soil cover is deformed owing to the growth of the plant so that the soil cover does not closely contact the soil and thus the functions thereof are reduced.

However, in the present application, the center opening positioned in the paper body has a cross shape. **Such a cross shape will always closely fit the stem size no matter what the plant size is, thus providing continuous protection without requiring further operation.**

- (2) The configuration of the openings:

The paper body of the weed-preventing paper in the present application includes a plurality of cross openings disposed on the same lateral crosscut passing therethrough. As described in the specification of the present application, the plant position may vary as the growth environment changes or the man-made planting varies and so on. Such a

configuration of the cross openings of the present application may be applied to any deviation of the planting position of a plant. Mason does not disclose multiple cross openings on the same lateral crosscut where only the radical perforations, which are torn to allow the insertion of the plant stem, and are used to provide for water permeability and to permit air to reach the soil are disclosed. [Mason, Abstract] Clearly, the radical perforations of Mason do not correspond to the cross openings of the present application.

It is to be noted that the radical perforations in Mason's soil cover are beforehand kept to be easily torn so as to permit the soil cover to be placed around the plant stem. However, the function of the cross openings on the same lateral crosscut in the present application is provided for the plant to pass therethrough. The function of the cross openings in the present application is different from that of the radical perforations in Mason's soil cover.

(3) The lateral crosscut from the central portion to an edge of the paper body:

The paper body of the weed-preventing paper in the present application includes a lateral crosscut passing through a cross opening arranged in the central portion and other opening(s) and extending to an edge of the paper body. However, Mason teaches that the soil cover includes at least one separation line extending outwardly from the stem opening where it is realized as the radical perforations, which are made with a standard die press, and arranged in diagonal fashion. [Mason, col. 2, lines 17-19, Figures 2 and 4] The configuration and the number of the at least one separation line taught by Mason is different from that of the lateral crosscut of the present application. Moreover, since the present lateral crosscut is already cut to be ready for use, it has no need to take additional work as the soil cover of Mason, has, for example, to tear the soil cover along with the radical perforations so that the plant stem could be placed in the circular center opening.

Therefore, based on the above comparisons, the weed-preventing paper of the present invention is totally different from the soil cover of Mason. Mason discloses nothing related to the structure disclosed in the present invention.

The independent Claim 16 is directed to a weed-preventing paper for cultivating a plant. The weed-preventing paper of Claim 16 comprises a paper body covering a surface of a soil where said plant is to be grown, and having at least two cross openings for said plant to pass therethrough, wherein one of said at least two cross openings is arranged in a central portion and

said at least two cross openings have a lateral crosscut passing therethrough and extending to an edge of said paper body for facilitating said paper body to be mounted around a stem of said plant and a weed-preventing agent contained in said paper body for blocking light so as to prevent the growth of a weed surrounding said plant. As described above, Mason does not teach a paper body having at least two cross openings for said plant to pass therethrough, wherein one of said at least two cross openings is arranged in a central portion. As also described above, Mason does not teach that a lateral crosscut extends from the central portion to an edge of said paper body. For at least these reasons, the independent Claim 16 is allowable over the teachings of Mason.

Claims 20 and 22 are dependent on the independent Claim 16. As discussed above, the independent Claim 16 is allowable over the teachings of Mason. Accordingly, Claims 20 and 22 are both also allowable as being dependent on an allowable base claim.

### **Rejections Under 35 U.S.C. § 103**

Within the Office Action, Claims 1, 3-8, 10-12, 14, 15 and 17-19 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mason in view of U.S. Patent No. 4,063,452 to Bradshaw (hereinafter referred to as "Bradshaw"). The applicants respectfully disagree.

### **Comparison of the present invention with Mason**

As specified in the amended Claim 1, a weed-preventing paper for cultivating a plant comprises a paper body covering a surface of a soil where said plant is to be grown, and having at least two cross openings for said plant to pass therethrough, wherein one of said at least two cross openings is arranged in a central portion and said at least two cross openings have a lateral crosscut passing therethrough and extending to an edge of said paper body for facilitating said paper body to be mounted around a stem of said plant, a weed-preventing agent contained in said paper body for blocking light so as to prevent the growth of a weed surrounding said plant; and a water indicator printed on said paper body and showing hydrous and anhydrous states thereof via different colors for being a reminder of watering.

As described above, Mason discloses a readily adjustable, moisture retainable and air transferable soil cover. The soil cover is made up of a biodegradable cellulose paper and a plastic film wherein the plastic film is adhered to the upper surface of the biodegradable cellulose paper. The soil cover has been perforated in a series of concentric circles together with at least one radial perforation. In use, the soil cover is torn along one of the concentric perforations so as to give the finished soil cover a diameter that will fit within the pot. Additionally, the center

concentric perforation is also removed to provide for the stem of the plant, and one of the radial perforations is torn to enable the cover to be placed about the plant.

For clearly differentiating the features and the functions of the present application from those of Mason, the differences therebetween are compared as follows:

1. The constitutions of the main body in Mason and the present application are different.

The soil cover of Mason is at least constituted by a biodegradable cellulose paper and a plastic film, [Mason, col. 1, lines 19-21, col. 2, lines 24-26, Figure 3], but the main body of the weed-preventing paper of the present application is only a paper body.

As described in the Background Of The Invention section of Mason, one objective of the soil cover of Mason is to prevent the evaporation of water from the soil into the atmosphere so that the plastic film is capable of transmitting gases rather than moisture. However, it is well known that when discarded, the plastic film is harmful to the environment.

2. The structures of the opening in Mason and the present application are different.

- (1) The shape of the center opening:

In Mason's soil cover, a central opening is formed by the removal of the center concentric perforation therein. Clearly, the central opening has a circular shape owing to the concentric perforation. The size of such a circular opening must be further adjusted as the plant size changes, such as by further tearing another concentric perforation. Before adjusting the size of the circular opening, it might occur that the soil cover is deformed owing to the growth of the plant so that the soil cover does not closely contact the soil and thus the functions thereof are reduced.

However, in the present application, the center opening positioned in the paper body has a cross shape. **Such a cross shape will always closely fit the stem size no matter what the plant size is, thus providing continuous protection without requiring further operation.**

- (2) The configuration of the openings:

The paper body of the weed-preventing paper in the present application includes a plurality of cross openings disposed on the same lateral crosscut passing therethrough. As described in the specification of the present application, the plant position may vary as the growth environment changes or the man-made planting varies and so on. Such a configuration of the cross openings of the present application may be applied to any

deviation of the planting position of a plant. Mason does not disclose multiple cross openings on the same lateral crosscut where only the radical perforations, which are torn to allow the insertion of the plant stem, and are used to provide for water permeability and to permit air to reach the soil are disclosed. [Mason, Abstract] Clearly, the radical perforations of Mason do not correspond to the cross openings of the present application.

It is to be noted that the radical perforations in Mason's soil cover are beforehand kept to be easily torn so as to permit the soil cover to be placed around the plant stem. However, the function of the cross openings on the same lateral crosscut in the present application is provided for the plant to pass therethrough. The function of the cross openings in the present application is different from that of the radical perforations in Mason's soil cover.

(3) The lateral crosscut from the central portion to an edge of the paper body:

The paper body of the weed-preventing paper in the present application includes a lateral crosscut passing through a cross opening arranged in the central portion and other opening(s) and extending to an edge of the paper body. However, Mason teaches that the soil cover includes at least one separation line extending outwardly from the stem opening where it is realized as the radical perforations, which are made with a standard die press, and arranged in diagonal fashion. [Mason, col. 2, lines 17-19, Figures 2 and 4] The configuration and the number of the at least one separation line taught by Mason is different from that of the lateral crosscut of the present application. Moreover, since the present lateral crosscut is already cut to be ready for use, it has no need to take additional work as the soil cover of Mason, has, for example, to tear the soil cover along with the radical perforations so that the plant stem could be placed in the circular center opening.

(4) The feature of the water indicator:

The weed-preventing paper of the present invention is directed not only for weed control and plant growth control, but also for water management. Mason's soil cover **does not disclose the usage of the water indicator for water management**. As described in the specification of the present application, water management has become a big concern for the plant owner, especially determining when to water a plant. In the present application, the water indicator printed on the weed-preventing paper provides a convenient, efficient way to achieve water management. Therefore, the present invention is more versatile. There is no mention,

suggestion or teaching of a water indicator used in Mason. Mason does not teach in any way or solve the water control problem, which the weed-preventing paper of the present invention overcomes.

#### **Comparison of the present invention with Bradshaw**

Bradshaw discloses a device for monitoring and indicating the concentration of a vapor at a phase interface. Bradshaw's device includes a sensing means and means for responsively coupling the sensing means to the vapor source phase to be monitored so that a representative vapor sample is presented to the sensing means, [Bradshaw, Abstract], where the sensing means includes an indicating component capable of visibly responding to changes in the concentration of a selected vapor component, [Bradshaw, Claim 2], which is one of ammonia vapor and water vapor, [Bradshaw, Claims 3 and 4]. The sensing element of Bradshaw includes a mixture of equal part hydrated cobalt chloride and cobalt thiocyanate absorbed in a disc of filter paper. [Bradshaw, Example 1]

Bradshaw does not disclose the paper body having at least two cross openings, and a weed-preventing agent contained in said paper body. The only similar feature of Bradshaw and the present application is the water indication concept. However, the implementation manners of these two water indication concepts are totally different from each other as described in the following:

1. The sensing element of Bradshaw is prepared by using the mixture of equal part hydrated cobalt chloride and cobalt thiocyanate to be absorbed in a disc of filter paper while the water indicator of the present invention is directly printed on the paper body.
2. As described in the present application, since the water indicator is directly printed on the paper body, it could be presented in a shape of a word or a figure for increasing the effect of reminding. However, the mixture of hydrated cobalt chloride and cobalt thiocyanate is absorbed in a disc of filter paper as taught by Bradshaw, so that the implementation in the present application can not be achieved thereby.

Based on the above comparisons, one skilled in the art could easily realize that the water indication mechanisms in the present application and Bradshaw are very different. In the present

application, the water indicator includes only one component and is directly printed on the paper body, which could be implemented by printing the water indicator in a shape of a word or a figure for providing more powerful reminding effects. Such an indication mechanism is simpler, more accurate and functional than that taught by Bradshaw.

**Mason in combination of Bradshaw**

It is asserted within the previous Office Action that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Mason to include a water indicator printed on a paper body as taught by Bradshaw, in order to detect a state of moisture. However, as discussed above, according to the comparisons in water indication between the present application and Bradshaw, one skilled in the art could easily realize the differences therebetween. Moreover, there is no hint, teaching or suggestion in either Mason or Bradshaw for incorporating the water indicator of Bradshaw into Mason's soil cover. Any allegation beyond what the prior art references teach is merely hindsight.

As discussed above, the rejection based on the combination of Mason and Bradshaw is not proper. Furthermore, based on the above comparisons, it is clear that the present invention is very distinguishable from the teachings of Mason, Bradshaw and their combination.

The independent Claim 1 is directed to a weed-preventing paper for cultivating a plant. The weed-preventing paper of Claim 1 comprises a paper body covering a surface of a soil where said plant is to be grown, and having at least two cross openings for said plant to pass therethrough, wherein one of said at least two cross openings is arranged in a central portion and said at least two cross openings have a lateral crosscut passing therethrough and extending to an edge of said paper body for facilitating said paper body to be mounted around a stem of said plant, a weed-preventing agent contained in said paper body for blocking light so as to prevent the growth of a weed surrounding said plant and a water indicator printed on said paper body and showing hydrous and anhydrous states thereof via different colors for being a reminder of watering. As described above, Mason does not teach a paper body having at least two cross openings for said plant to pass therethrough, wherein one of said at least two cross openings is arranged in a central portion. As also described above, Mason does not teach that a lateral crosscut extends from the central portion to an edge of said paper body. Further, Bradshaw does not teach a paper body having at least two cross openings for said plant to pass therethrough, wherein one of said at least two cross openings is arranged in a central portion. Bradshaw also does not teach that a lateral crosscut extends from the central portion to an edge of said paper body. Accordingly, neither Mason, Bradshaw nor their combination teach a paper body having at



least two cross openings for said plant to pass therethrough, wherein one of said at least two cross openings is arranged in a central portion. Further, neither Mason, Bradshaw nor their combination teach that a lateral crosscut extends from the central portion to an edge of said paper body. As also described above, neither Mason, Bradshaw nor their combination teach a water indicator printed on the paper body and showing hydrous and anhydrous states thereof via different colors. For at least these reasons, the independent Claim 1 is allowable over the teachings of Mason, Bradshaw and their combination.

Claims 3-8, 10-12, 14 and 15 are dependent on the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Mason, Bradshaw and their combination. Accordingly, Claims 3-8, 10-12, 14 and 15 are all also allowable as being dependent on an allowable base claim.

Claims 17-19 are dependent on the independent Claim 16. As discussed above, the independent Claim 16 is allowable over the teachings of Mason. Accordingly, Claims 17-19 are all also allowable as being dependent on an allowable base claim.

Within the Office Action, Claims 9, 13 and 21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mason in view of Bradshaw, further in view of U.S. Patent No. 5,729,929 to Burke (hereinafter referred to as "Burke"). Claims 9 and 13 are dependent on the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Mason, Bradshaw and their combination. Accordingly, Claims 9 and 13 are both also allowable as being dependent on an allowable base claim.

Claim 21 is dependent on the independent Claim 16. As discussed above, the independent Claim 16 is allowable over the teachings of Mason. Accordingly, Claim 21 is also allowable as being dependent on an allowable base claim.

Should the Examiner have any questions or comments, they are encouraged to call the undersigned at (408) 530-9700 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,  
HAVERSTOCK & OWENS LLP

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**CERTIFICATE OF MAILING (37 CFR § 1.8(a))**

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

HAVERSTOCK & OWENS LLP.

Date: 7-27-05 By: [Signature]